

**ABSTRACT OF THE DISCLOSURE**

A rotation angle detecting apparatus having a reference signal-generating device that generates a reference signal; a rotation angle detecting section that generates an output signal in response to the reference signal; a feedback control section that determines a rotational angular speed based on the output signal and performs feedback control to calculate a rotation angle; and a free-running range change device that narrows a free-running range of the rotational angular speed at a time of starting settling of the rotation angle. In the rotation angle detecting apparatus, the free-running range of the rotational angular speed at the time of starting the settling of the rotation angle is narrowed, whereby the settling time can be shortened. Accordingly, the time that elapses before it becomes possible to detect a rotation angle can be shortened correspondingly.